

Asymptotic symmetry breakdown and restoration in a statistical system of particles with a short-range vector interaction, and cosmological models

Ivanov G.

Kazan Federal University, 420008, Kremlevskaya 18, Kazan, Russia

Abstract

A relativistic statistical system of particles interacting via a massive Proca vector field on a Schwarzschild gravitational field background, is considered. It is shown that in the case of attraction of like charges, an asymptotic breakdown of the discrete symmetry is possible at large r , and its restoration at $r \rightarrow \infty$. Isotropic cosmological models are constructed both for the case of attracting and repulsing charges. © 1983 Plenum Publishing Corporation.

<http://dx.doi.org/10.1007/BF00892395>
